

New Jersey Department of Education Office of Educational Technology www.state.nj.us/education

NJ School Technology Survey 2001 Report



June 2001

In 1997, the New Jersey Department of Education implemented an aggressive, systemic approach to accelerate the implementation of educational technology in all schools throughout the state. At that time, 15 benchmarks were established that defined the expected goals by the year 2002. The department's educational technology vision is that all students will be able to achieve the Core Curriculum Content Standards because they will have unlimited access to people, to the vast array of curriculum and instruction offered in the state, and to information and ideas, no matter where they exist.

To measure progress, the department initiated the public school technology survey in the spring of 1999. The data in this third-year report indicate that the state's educational technology goals of 1997 have been accomplished. Because of this achievement, the department is in the process of establishing new educational technology goals - to be announced this fall.

There are several key initiatives that serve to advance the achievement of educational technology goals. Each has contributed to the progress noted in this report. See page 8 for the listing of the state's educational technology initiatives and visit the department's educational technology web site for details.

New Jersey can take great pride in where, how and why educational technology is applied to the instructional process. There are still many roads to travel, but the journey progresses with gusto!





Photo courtesy of Millville School District

By the Numbers...

87%	Survey Response Rate for the School Technology Survey 2001
99.6%	Districts with Technology Coordinators

99% Schools with Internet connectivity

90% Schools with web sites

86.8% Schools that are using **Internet filtering** software

Teachers with technology 76.9% skills at intermediate, advanced or instructor levels

AND...

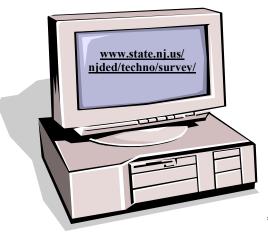
Student to multimedia 4.5 to 1 computer ratio



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Student to Multimedia Computer Ratio			
	1999	2000	2001
State Total	7.2 to 1	5.3 to 1	4.5 to 1
Counties:			
Atlantic	8.3 to 1	4.7 to 1	4.5 to 1
Bergen	6.3 to 1	5.1 to 1	4. 2 to 1
Burlington	6.8 to 1	4.4 to 1	3.9 to 1
Camden	5.5 to 1	5.4 to 1	4.1 to 1
Cape May	7.5 to 1	4.2 to 1	3.8 to 1
Cumberland	6.2 to 1	3.8 to 1	3.3 to 1
Essex	7.8 to 1	6.3 to 1	5.5 to 1
Gloucester	6.7 to 1	5.0 to 1	3.9 to 1
Hudson	7.0 to 1	5.3 to 1	4.9 to 1
Hunterdon	6.8 to 1	4.0 to 1	3.3 to 1
Mercer	6.3 to 1	4.8 to 1	4.2 to 1
Middlesex	10.2 to 1	6.3 to 1	5.5 to 1
Monmouth	7.5 to 1	5.4 to 1	4.5 to 1
Morris	6.1 to 1	5.7 to 1	4.3 to 1
Ocean	8.4 to 1	6.6 to 1	5.1 to 1
Passaic	9.3 to 1	6.7 to 1	5.5 to 1
Salem	7.1 to 1	4.6 to 1	3.4 to 1
Somerset	7.3 to 1	4.8 to 1	3.5 to 1
Sussex	7.7 to 1	6.2 to 1	4.9 to 1
Union	6.7 to 1	5.0 to 1	4.3 to 1
Warren	6.4 to 1	4.6 to 1	4.3 to 1
Regions:			
North	7.1 to 1	5.7 to 1	4.8 to 1
Central	7.7 to 1	5.4 to 1	4.5 to 1
South	6.6 to 1	4.7 to 1	3.9 to 1
Districts:			
*Abbott	6.8 to 1	5.0 to 1	4.6 to 1
Non-Abbott	7.3 to 1	5.4 to 1	4.4 to 1



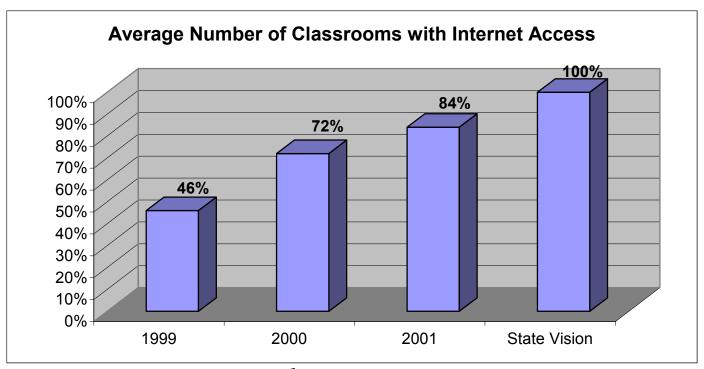
Change in parameters for multimedia computers in 2002!

This year's survey identified multimedia-capable computers as having a baseline of 486 and above (i.e. Pentium, Pentium II, Pentium III, Celeron, etc.) or Mac 40 series (68040). Next year's standard for multimedia-capable computers will change. In 2002, both the technology survey and report card standards will consider Pentiums and above or Power Macs and equivalents as multimedia-capable computers.

Percent of Schools with Students Using the World Wide Web on a Regular Basis

State Total 67.0% 50.6% 37.3% 28.7% 38.2% 47.7% 4.3% 10.4% 14 Counties: Atlantic 61.8% 55.3% 45.1% 35.3% 32.9% 40.8% 2.9% 11.8% 12 Bergen 68.4% 49.3% 27.6% 28.7% 40.8% 52.2% 2.9% 9.0% 18 Burlington 54.5% 49.5% 36.4% 42.9% 34.9% 53.4% 2.7% 15.6% 10 Camden 56.1% 42.6% 32.8% 37.4% 41.2% 57.3% 6.5% 15.4% 9	001 1.0% 2.7% 3.4% 0.2%
State Total 67.0% 50.6% 37.3% 28.7% 38.2% 47.7% 4.3% 10.4% 14 Counties: Atlantic 61.8% 55.3% 45.1% 35.3% 32.9% 40.8% 2.9% 11.8% 12 Bergen 68.4% 49.3% 27.6% 28.7% 40.8% 52.2% 2.9% 9.0% 18 Burlington 54.5% 49.5% 36.4% 42.9% 34.9% 53.4% 2.7% 15.6% 10 Camden 56.1% 42.6% 32.8% 37.4% 41.2% 57.3% 6.5% 15.4% 9	1.0% 2.7% 3.4%
Counties: Atlantic 61.8% 55.3% 45.1% 35.3% 32.9% 40.8% 2.9% 11.8% 12 Bergen 68.4% 49.3% 27.6% 28.7% 40.8% 52.2% 2.9% 9.0% 18 Burlington 54.5% 49.5% 36.4% 42.9% 34.9% 53.4% 2.7% 15.6% 10 Camden 56.1% 42.6% 32.8% 37.4% 41.2% 57.3% 6.5% 15.4% 9	2.7% 3.4%
Atlantic 61.8% 55.3% 45.1% 35.3% 32.9% 40.8% 2.9% 11.8% 12 Bergen 68.4% 49.3% 27.6% 28.7% 40.8% 52.2% 2.9% 9.0% 18 Burlington 54.5% 49.5% 36.4% 42.9% 34.9% 53.4% 2.7% 15.6% 10 Camden 56.1% 42.6% 32.8% 37.4% 41.2% 57.3% 6.5% 15.4% 9	3.4%
Bergen 68.4% 49.3% 27.6% 28.7% 40.8% 52.2% 2.9% 9.0% 18 Burlington 54.5% 49.5% 36.4% 42.9% 34.9% 53.4% 2.7% 15.6% 10 Camden 56.1% 42.6% 32.8% 37.4% 41.2% 57.3% 6.5% 15.4% 9	3.4%
Burlington 54.5% 49.5% 36.4% 42.9% 34.9% 53.4% 2.7% 15.6% 10 Camden 56.1% 42.6% 32.8% 37.4% 41.2% 57.3% 6.5% 15.4% 9	
Camden 56.1% 42.6% 32.8% 37.4% 41.2% 57.3% 6.5% 15.4% 9	20/
	J. Z /0
Cone May 57 10/ 51 50/ 20 20/ 20 20/ 50 00/ 50 00/ 40/	.2%
Cape May 57.1% 51.5% 39.3% 39.3% 39.4% 50.0% 3.6% 9.1% 10).7%
Cumberland 83.8% 41.3% 58.8% 16.2% 56.5% 37.3% 0.0% 2.2% 3	.9%
Essex 76.1% 60.1% 39.4% 22.2% 34.2% 51.7% 1.7% 4.7% 7	.9%
Gloucester 53.5% 41.9% 33.3% 32.4% 50.0% 50.7% 14.1% 8.1% 16	6.0%
Hudson 55.8% 43.1% 32.4% 34.6% 34.3% 47.2% 9.6% 22.5% 17	7.6%
Hunterdon 59.0% 31.1% 27.5% 38.5% 55.6% 52.5% 2.6% 13.3% 20	0.0%
Mercer 58.3% 64.7% 44.2% 36.7% 23.5% 32.6% 5.0% 9.8% 23	3.3%
Middlesex 80.0% 67.1% 43.1% 18.6% 23.4% 44.4% 1.4% 8.9% 8	.8%
Monmouth 72.6% 50.7% 35.2% 23.1% 40.4% 35.9% 4.3% 7.4% 28	3.3%
Morris 69.1% 47.8% 44.3% 27.3% 47.1% 43.6% 3.6% 4.3% 12	2.1%
Ocean 71.8% 47.7% 33.0% 24.4% 39.8% 50.5% 3.8% 12.5% 14	1.4%
Passaic 79.2% 67.3% 50.4% 18.8% 24.8% 43.0% 2.1% 5.9% 6	.6%
Salem 60.7% 47.2% 32.4% 32.1% 44.4% 58.8% 7.1% 5.6% 8	.8%
Somerset 61.7% 45.8% 41.4% 36.7% 37.5% 47.1% 1.7% 15.3% 11	1.4%
Sussex 56.4% 50.0% 32.4% 38.5% 35.0% 45.9% 5.1% 10.0% 24	1.6%
Union 72.0% 43.3% 32.9% 20.3% 41.7% 49.7% 7.6% 14.2% 16	6.8%
Warren 55.9% 22.9% 18.4% 35.3% 57.1% 68.4% 8.8% 20.0% 13	3.2%
Regions:	
	00/
	3.2%
	7.6%
South 57.9% 46.7% 38.5% 35.2% 41.4% 51.0% 5.5% 11.6% 10).4%
Districts:	
*Abbott 71.2% 47.8% 38.1% 23.8% 40.9% 49.5% 3.2% 10.2% 12	2.3%
Non-Abbott 64.5% 51.2% 37.5% 29.4% 37.6% 47.9% 4.5% 10.4% 14	

^{*}The Abbott School Districts are 30 special needs districts located in economically disadvantaged areas.



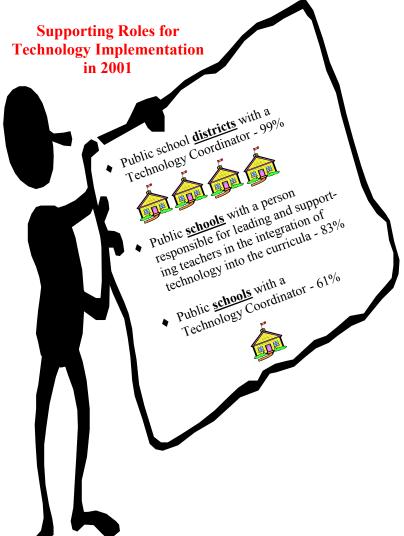


Photo courtesy of Millville School District





 $Photo\ courtesy\ of\ Paterson\ School\ District$



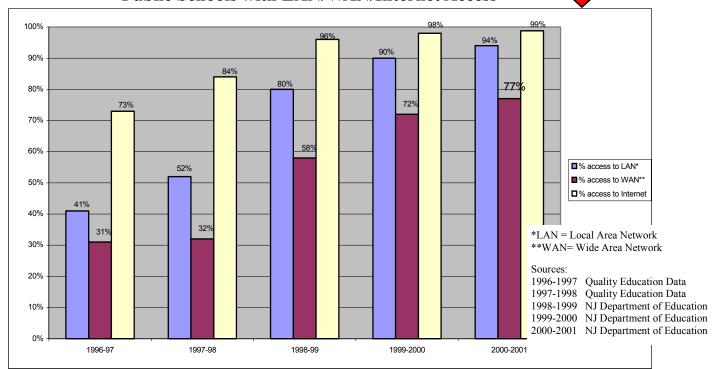
Photo courtesy of Plainfield School District

Survey says:

New Jersey schools see

- ♦ professional development
- ♦ curriculum integration
- ♦ support as priority areas of assistance.

Public Schools with LAN/WAN/Internet Access



To view the survey questions and a complete report of the survey results, check the Department of Education web site at: www.state.nj.us/njded/techno/survey

Photo courtesy of North Wildwood School District



Percent of Classrooms with Internet Connections				
interne	t Coni	2000	2001	
	1000	2000	2001	
State Total	NA	71.9%	84.0%	
Counties:				
Atlantic	NA	82.8%	95.4%	
Bergen	NA	69.7%	79.9%	
Burlington	NA	94.2%	95.7%	
Camden	NA	87.5%	98.1%	
Cape May	NA	86.0%	91.9%	
Cumberland	NA	86.5%	96.2%	
Essex	NA	43.3%	71.1%	
Gloucester	NA	83.6%	89.2%	
Hudson	NA	78.7%	85.8%	
Hunterdon	NA	94.0%	95.4%	
Mercer	NA	84.2%	88.4%	
Middlesex	NA	57.0%	57.8%	
Monmouth	NA	71.6%	87.2%	
Morris	NA	67.5%	88.1%	
Ocean	NA	60.0%	82.1%	
Passaic	NA	51.4%	83.0%	
Salem	NA	85.1%	98.1%	
Somerset	NA	82.3%	88.1%	
Sussex	NA	71.9%	95.3%	
Union	NA	73.5%	82.1%	
Warren	NA	93.9%	93.6%	
Regions:				
North	NA	63.8%	81.8%	
Central	NA	70.1%	79.7%	
South	NA	87.3%	95.1%	
Districts:				
Abbotts	NA	68.2%	82.8%	
Non-Abbotts	NA	72.8%	84.3%	

Photo courtesy of Clayton Public Schools



Survey says:

When schools have
Internet access, they tend to
have an Acceptable Use
Policy (AUP) or Internet
filtering software.
Ninety-nine percent of schools
in New Jersey have one or the
other - or both.

Example of Distance Learning:

The power of learning rests with our students and is exemplified in the activities and outcomes of a joint program between Woodbury and Monroe Public Schools in Gloucester County.

These schools were awarded a Pairing and Sharing grant from the NJDOE to support a web-based problem-solving program entitled "Technology and Learning". The communication among the staff planning this project and the students working through the details of it were clear and impressive. The project involved life in a closed environment called a biome. Students chose the location/environment and began to investigate the issues and work toward the solutions necessary to sustain life in their chosen environment - the ocean.

During the research phase, a student made an online contact with a NASA representative. This contact grew into a wonderful working relationship between the schools and NASA. The teachers and students communicate with scientists and the teachers visited NASA twice to discuss the work being done. This project has opened doors for the students, their teachers and their schools.

One outgrowth of this distance learning experience is that more teachers are now looking at problem-based learning as an effective instructional approach. NASA has expressed the desire to continue beyond the grant-funded period and to create a template for similar distance learning activities.

Percent of Schools with Distance Learning Capabilities			
	1999	2000	2001
State Total	42.0%	67.7%	76.8%
Counties:			
Atlantic	51.5%	67.1%	64.8%
Bergen	36.3%	72.2%	79.4%
Burlington	47.2%	70.6%	76.1%
Camden	50.5%	69.1%	75.6%
Cape May	92.9%	78.8%	92.9%
Cumberland	48.6%	43.5%	74.5%
Essex	29.9%	65.3%	78.8%
Gloucester	41.4%	73.0%	78.7%
Hudson	48.5%	65.7%	84.3%
Hunterdon	34.1%	75.6%	82.5%
Mercer	45.0%	72.5%	64.0%
Middlesex	34.0%	58.9%	68.1%
Monmouth	41.6%	71.3%	80.0%
Morris	35.2%	63.8%	83.6%
Ocean	57.9%	78.4%	76.3%
Passaic	32.6%	45.5%	71.1%
Salem	53.6%	77.8%	73.5%
Somerset	48.3%	72.2%	67.1%
Sussex	55.3%	70.0%	75.7%
Union	34.8%	74.8%	81.8%
Warren	47.1%	65.7%	92.1%
Regions:			
North	35.7%	64.8%	80.0%
Central	39.7%	70.5%	74.8%
South	48.4%	68.6%	75.3%
Districts:			
Abbotts	43.7%	69.4%	76.6%
Non-Abbotts	39.4%	59.9%	76.8%

Percent of Teachers per School at Each Skill Level in the Use of Technology in Instruction Beginner Intermediate Advanced Instructor 1999 2000 2001 1999 2000 2001 1999 2000 2001 1999 2000 2001 State Total 35.5% 30.4% 26.1% 41.1% 46.2% 48.6% 18.4% 20.4% 21.5% 5.9% 6.4% 6.8% Counties: 32.3% 28.1% 40.5% 46.6% 49.1% 19.3% 18.7% 20.4% 5.7% 5.8% 7.2% Atlantic 36.9% 29.9% 26.3% 21.8% 43.0% 48.8% 51.4% 21.6% 23.0% 22.4% 6.7% 6.5% Bergen 32.8% 27.1% 20.8% 40.7% 47.7% 53.5% 18.2% 21.4% 20.5% 8.0% 6.1% 6.1% Burlington 27.7% 46.1% 50.1% 49.9% 17.5% 21.1% 20.0% 5.5% 30.1% 25.3% 5.3% 6.5% Camden Cape May 34.8% 22.9% 20.0% 43.6% 52.9% 52.2% 18.9% 20.2% 23.2% 4.9% 6.6% 6.3% 32.8% 40.6% 47.0% 77.3% 16.6% 15.4% Cumberland 37.7% 25.4% 20.8% 5.3% 6.3% 5.7% 43.4% 39.7% 34.5% 36.4% 17.2% 17.2% 40.5% 43.1% 17.8% 5.4% 6.3% 7.4% Essex 24.3% 22.1% 16.5% 47.6% 49.0% 51.1% 23.7% 23.4% 26.9% 7.4% Gloucester 7.3% 7.6% Hudson 40.9% 35.9% 32.6% 39.1% 44.1% 47.6% 16.3% 18.0% 15.7% 4.7% 5.6% 6.6% Hunterdon 26.6% 28.6% 19.2% 43.7% 48.0% 45.6% 25.0% 19.8% 25.8% 7.7% 8.8% 7.4% 6.2% 7.6% 32.5% 35.1% 24.0% 38.9% 43.2% 49.0% 18.9% 20.4% 22.2% 7.4% Mercer Middlesex 46.1% 38.4% 31.1% 36.8% 40.9% 46.9% 14.1% 18.1% 18.7% 4.8% 5.0% 5.5% 32.6% 21.5% 21.9% 48.2% 49.5% 50.5% 17.2% 24.1% 22.2% 5.2% 6.9% 7.4% Monmouth Morris 27.3% 31.6% 26.0% 45.9% 43.7% 44.6% 20.4% 21.0% 24.7% 6.7% 7.3% 6.8% 17.0% 26.2% 27.5% 6.4% 39.0% 35.5% 49.0% 50.1% 16.1% 20.5% 5.4% 6.5% Ocean Passaic 57.7% 46.3% 36.3% 31.2% 42.2% 40.2% 10.8% 13.3% 19.8% 3.3% 4.5% 6.3% Salem 30.4% 26.2% 15.4% 45.3% | 52.9% | 47.5% 23.7% 21.7% 30.2% 5.0% 6.7% 10.1% 46.7% 48.2% 50.8% Somerset 23.6% 23.9% 18.7% 22.1% 23.6% 25.8% 7 5% 6.6% 7.5% Sussex 27.3% 26.8% 19.3% 38.0% | 48.1% | 51.7% 20.0% 19.0% 22.8% 7.6% 7.1% 6.8% 33.1% 26.1% 27.5% 38.2% 44.5% 42.8% 22.0% 23.9% 25.4% 6.0% 8.3% 7.1% Union Warren 27.8% 18.9% 17.4% 52.1% 51.7% 52.5% 14.6% 21.8% 24.5% 6.3% 7.5% 7.5% Regions: 19.3% 20.7% 6.4% 6.8% 37.8% 33.6% 28.6% 40.0% | 44.7% | 46.5% 17.8% 5.6% North Central 35.5% 28.7% 25.5% 40.6% 45.8% 47.7% 18.4% 21.6% 22.0% 5.8% 6.7% 6.8% South 31.9% 27.5% 22.5% 43.5% 49.0% 53.5% 19.3% 20.6% 22.2% 6.4% 6.1% 6.8%

Photo courtesy of the Salem City School District





Photo courtesy of the Warren County ETTC

Educational Technology Training Centers & Technology Fellowship

Perfect Together!

Educational Technology Training Centers (ETTCs) were established in July 1997. These highly successful centers offer superb professional development programs that provide teachers and administrators with many effective educational technology applications. To assist the ETTCs in their mission, the department initiated a program for school year 2001-2002 entitled Technology Fellowship: Mentoring and Modeling.

The department's Technology Fellowship initiative is the first of its kind in the nation. This program celebrates the achievements of 20 exemplary technology-using teachers and enables them to share their outstanding curricula applications with others via a statewide program. Working in conjunction with the ETTCs, Technology Fellowship recipients are released from teacher responsibilities for the school year (2001-2002) to share their classroom expertise throughout the state. Serving as trainers and mentors, the Tech Fellows will be offering many workshops at ETTCs, visiting schools to mentor teachers, and developing a web-based project related to the Core Curriculum Content Standards. See web site for details on the Technology Fellowship recipients and their projects: [www.state.nj.us/njded/techno/fellowship/].

Here are the Stars!

Technology Fellowship Recipients:

Donna Armstrong - Clearview Regional High School District

Neal Dickstein - East Windsor Regional School District

Lori Ebanietti - Mahwah School District

Sharon Faith - Southern Regional School District

Shawn Fitzpatrick - Burlington Township School District

Cathy Grimaldi - Old Bridge Township School District

Barry Haines - Mendham Borough School District

Suzanne LeBeau - Long Branch School District

Barbara Lohse - Allamuchy Township School District

Maryanne O'Brien - West Milford Township School District

John O'Hara - Kearny School District

Christine Osei-TuTu - Millville Public Schools

Doreen Roksvaag - Delaware Township School District

Susan Ross - Middle Township School District

Scott Rubin - Elizabeth Public Schools

Carol Sprague - Sussex County Technical Schools

Steven Verger - Warren Township School District

Diane Viehweg - Stratford School District

Rodney West - Orange School District

Kathleen Willson - Greater Egg Harbor Regional High School District

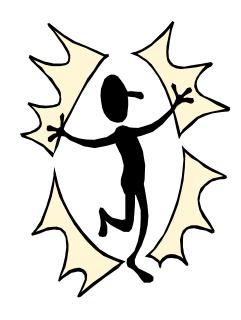




Photo of BCIT teachers at the Burlington County ETTC

Educational Technology Training Centers (ETTCs):

ATLANTIC BERGEN BURLINGTON CAMDEN CAPE MAY **CUMBERLAND ESSEX GLOUCESTER** HUDSON **HUNTERDON**

MERCER

www.acettc.stockton.edu www.bergen.org/ETTC www.lr.k12.nj.us/ETTC www.ccts-ettc.org/ettc www.capemaytech.net/ettc www.cumberland.tec.nj.us/ettc www.somsd.k12.nj.us/~ettc www.gc-ettc.org www.jerseycity.k12.nj.us www.hcrhs.hunterdon.k12.nj.us/ettc ettc.prs.k12.nj.us

MIDDLESEX MONMOUTH **MORRIS** OCEAN **PASSAIC SALEM SOMERSET** SUSSEX UNION WARREN

www.techtrain.org www.mcv.mcvsd.k12.nj.us/ettc www.mcvts.org/ettc/ettcpage.htm www.ettc-ocean.org www.pcti.tec.nj.us/pcettc www.salemettc.org www.scti.org/ETTC www.sussex.tec.nj.us/ettc www.ucvts.tec.nj.us/ettc www.warrennet.org/ettc

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Technology Survey Coordinator Sue Sullivan sue.sullivan@doe.state.nj.us



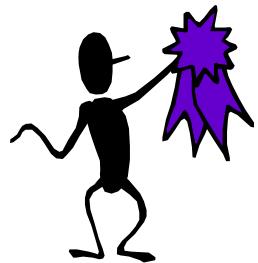


Photo courtesy of North Wildwood School District



EDUCATIONAL TECHNOLOGY INITIATIVES:
Programs that contribute to NJ's educational technology progress

www.state.nj.us/njded/techno/toc.htm

1997
Distance Learning Network Aid 1997 - 2002
Educational Technology Training Centers (ETTC) 1997 - present
Local Technology Training 1997 - 2001

1998
State Operated School Districts - Technology Model Schools 1998 - 2000
Technology Literacy Challenge Fund - Round I, II, III 1998 - 2000
Universal Service Fund or E-Rate 1998 - present
County Coordinated Services 1999 - 2001

1999
Assistive Technology for Students with Disabilities Training Project 1999 - present
County Coordinated Services 1999 - 2001

2000
Access—Collaboration—Equity (ACE) Centers 2000 - 2002
Educational Technology and Whole School Reform Program 2000 - 2001
Pairing and Sharing Instructional Resources via Teleconferencing - Round I, II 2000 - 2002

2001
NJ Educational Leadership Institutes for Technology in Education (NJ ELITE) 2001 - 2003
Technology Fellowship: Mentoring & Modeling 2001 - 2002